Lake Mead Environmental Education

National Recreation Area National Park Service





Grade 5 - Field Program "Variety is the Spice of Life!"

Theme

At first glance, the Mojave Desert appears barren and lifeless, but upon closer study, the area supports a diverse population of plant and animal life.

Objectives

Students will record/compare the number of different plant species within two study areas. Students will record/compare evidence of animal activity within two study areas. Students will relate one way they think biodiversity is important.

Vocabulary

<u>biodiversity</u> - the condition of nature in which a wide variety of species live in a single area (the variety of living things)

<u>endangered species</u> - an animal or plant species in danger of becoming extinct <u>species</u> - a class of individuals having common attributes and designated by a common name

<u>transect</u> - a sample area of vegetation usually in the form of a narrow continuous strip that is used for the tabulation of data likely to vary within a stand or area. threatened species - a species whose numbers are low or declining

Background Information Lake Mead is an excellent resource for studying diversity in the Mojave Desert. Although most people are well acquainted with the recreation area's water, that resource only comprises 13% of the recreation area. The other 87% is land based. In its 1.5 million acres, Lake Mead NRA supports over 900 vascular plant species and approximately 345 vertebrate species which include mammals, reptiles, amphibians, and birds.

Although biologists are not exactly sure of how many species of living organisms there are on earth, there is clear evidence that at least 1.4 million living species have been named. Several references indicate speculation of 5 - 30 million living species. There is worldwide concern regarding a decline in the earth's biodiversity. The consensus of the scientific community is that the rate of decline is directly related to human population expansion and habitat destruction. Lake Mead NRA is concerned about the decline of biodiversity and is taking steps to slow this process within it's boundaries and the surrounding areas.

<u>Before</u> the Field Trip Activity Have your students create their own field journal. Journals provide a means of recording observations in the field and can be accessed at a later time for comparison studies. On two separate pages they will need to write the following: **Study Area #, # of plant species** and **# of animal species**. Please be sure the students bring the field journals with them on the day of the field trip.

After the Field Trip Activity

Now that the students have experienced conducting diversity studies, have them do their own study in their yards at home or in the school yard. How do they compare with the study conducted at Lake Mead National Recreation Area? Which area was more diverse and why?

